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ABSTRACT

The 1994 School-to-Work Opportunities Act (STWOA) offers states federal assistance to develop and implement statewide systems for ensuring that all K-12 students have a seamless transition from secondary education to high-quality employment and/or further education. This report describes findings from studies by the Mid-Continent Regional Educational Laboratory (McREL) and Northwest Regional Educational Laboratory (NWREL), which examined how colleges of education in 25 states prepared preservice teachers for working in STW environments. Surveys asked about: educational strategies for providing teachers with skills and knowledge regarding STW; percentage of preservice teachers participating in work-related experiences; level of faculty involvement in activities to prepare teachers for STW systems; reasons for low faculty involvement; extent to which teacher education program administrators felt their graduates were prepared for activities involved in school-based learning, work-based learning, and connecting activities; and types of professional development opportunities offered by institutions to provide existing classroom teachers with STW skills and knowledge. Results indicated a limited awareness, understanding, and acceptance of STW concepts among higher education institutions. Administrators believed their graduates were well-prepared to provide school-based learning, less prepared to connect school and work, and not well-prepared to facilitate work-based learning opportunities for students. Most indicated no plans to further develop STW emphasis in their programs. Three appendixes offer the McREL cover letter, the NWREL cover, and a tabulated copy of the Teacher Preparation for School-to-Work Survey. (SM)

ED 424 203

Northwest Regional Educational Laboratory

RESEARCH REPORT

TEACHER PREPARATION AND SCHOOL-TO-WORK

A 25-State Survey of Higher Education

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June 1998

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EXECUTIVE SUMMARY

An old adage says "we teach as we've been taught," but we are finding our students require new teaching and learning methods in order to become satisfied citizens in our changing society. Teachers need to reconnect curriculum to real world contexts in order to help students learn how to gain and apply knowledge in a variety of settings. One federal initiative that helps students learn and use real world content is called School-to-Work.

The 1994 School-to-Work Opportunities Act (STWOA) provides states with federal assistance to develop and implement statewide systems that ensure all K-12 students have access to a seamless transition from secondary education to high-quality employment and/or further education. This collaborative effort between the U.S. Departments of Education and Labor relies on three strategies: (1) school-based learning that is relevant to the world of work and reflects strong academic standards; (2) awareness, exploration, and participation in careers and work-related learning experiences; and (3) connecting activities that establish links between schools and businesses. These strategies are implemented through grants to state and local partnerships of educators, business, industry, labor, and community-based organizations.

Professional development is a critical factor in the success of School-to-Work. Teachers, counselors, and administrators need to understand its underlying concepts and be able to support it in their professional practices. Program grantees typically allocate a significant part of their budgets to providing in-service training for educators from participating schools. However, little is known about efforts underway at the pre-service level, the place where our future teaching workforce takes shape. Under the direction of Bob Keller at McREL and Tom Owens at NWREL study designs were prepared, a survey instrument developed and administered to Colleges of Education, and data analyzed and reported (see Keller, 1998 for a separate report based only on the McREL findings). College deans or representatives from a total of 185 university and college teacher education programs in 25 states completed the survey.

The survey asked questions regarding the particular educational strategies used to provide future teachers with skills and knowledge regarding School-to-Work; the percentage of pre-service teacher education students participating in work-related experiences; level of faculty involvement in activities that help prepare teachers for School-to-Work systems; factors that might explain low faculty involvement; rating of the extent to which teacher education program administrators feel their graduates are prepared for activities involved in school-based learning, work-based learning, and connecting activities; and the types of professional development opportunities offered by their institution to provide existing classroom teachers with skills and knowledge regarding School-to-Work.

Survey findings show there is limited awareness, understanding, and acceptance of School-to-Work concepts among institutions of higher learning in the twenty-fives states surveyed. Data suggest teacher education administrators believe their graduates are well prepared to provide school-based learning, but are less well prepared to connect school and work. Respondents also believe their graduates are not well prepared to facilitate work-based learning opportunities for

students. Yet, this disparity does not constitute a priority in terms of program planning: Most representatives indicated no plans to further develop a STW emphasis in their teacher preparation program. Their commitment to STW was moderate.

The National School-to-Work Office, in its 1997 report to Congress, indicated that STW continues to grow. Given the disparity between perceived level of knowledge and the large number of students, districts, and businesses involved in STW, it would be beneficial for teacher educators to emphasize STW in pre-service teacher education programs. Specifically, we recommend teacher educators focus on integration of work-based learning, school-based learning, and career exploration..

For decades, teacher education programs have been engaged in work-based learning through the student experience. Indeed, student teaching models STW because student teachers are supported by university personnel (school-based learning) and supervising teachers (worksite mentors) who regularly meet to conference about pre-service teachers' progress (connecting activity). If the intention of student teaching is supported work emulation and more school districts are becoming involved in STW, then pre-service teachers should have some understanding of STW concepts and vocabulary.

STW advocates in government, school districts, business/industry should encourage pre-service teacher education programs to prioritize STW and emphasize it as part of pre-service training. If colleges are customer driven, the demand by school districts to hire new teachers having an understanding of STW and its applications to contextual learning should help increase the priority for STW content and methodology in teacher pre-service programs.

Teacher education program support of STW is critical in sustaining the momentum of school reform, and yet few of the teacher education programs completing the survey say they are adequately training pre-service teachers in STW concepts. Identification and dissemination of best practice teacher education models, support for development of model programs, and information sharing may help teacher educators see benefits in STW, dialogue about issues surrounding STW implementation, and design better teacher education programs.

Further study is needed to accurately describe pre-service teachers' transition from school to work in our nation's public schools. This survey targeted the perceptions of teacher education administrators and provided a picture of the field. A survey and follow up study of novice teachers would provide better insight into the usefulness of STW knowledge and the knowledge gaps that exist between new teachers' understanding of STW and what is required to be successful in the field.

ACKNOWLEDGMENTS

We wish to thank the following regional representatives to the U.S. Department of Education for their support, vision, and assistance in the completion of this important survey: Stephanie Jones, Region V; Lynn Simons, Region XIII; Loni Hancock, Region IX; and Carla Nuxoll, Region X.

This report could not be completed without the hard work and dedication of our Northwest Regional Educational Laboratory staff. Dennis Wakeland provided edit and lay-out services, and Chris Warren assisted with production.

INTRODUCTION

The 1994 School-to-Work Opportunities Act (STWOA) provides states with federal assistance to develop and implement statewide systems to ensure K-12 students a seamless transition from secondary education into high quality employment and/or further education. School-to-Work (STW), which is a collaborative effort between the U.S. Departments of Education and Labor, promotes three major goals: (a) school-based learning that is relevant to the world of work and reflects strong academic standards; (b) awareness, exploration, and participation in careers and work-related experiences; and (c) connecting activities that establish links between schools and businesses. These strategies are implemented through grants to state and local partnerships of educators, business/industry/labor, and community-based organizations.

STWOA extended the scope and timeline of a reform movement already taking root in schools. The Carl Perkins Vocational Education Act (article IIc. and IIIe. that support Tech Prep), Goals 2000, and other legislation infused dollars into the education system to support change. Unlike Carl Perkins, STWOA funding is intended to be "seed money" to begin the process of change, but sustaining momentum requires educators to view workplace-related competencies (for example, those identified in the SCANS report[1]) career education, authentic assessment, and contextual learning as being of primary importance to the education of our children.

If classroom teachers do not see the intrinsic value of these teaching/learning methodologies and curriculum perspectives, students will not be affected by what researchers are validating as valuable learning experiences. Professional development is a critical factor in the success of STW. Teachers, counselors, and administrators need to understand its underlying concepts and support it in their professional practices. STW grantees typically allocate a substantial part of their budgets to professional development activities (i.e. in-services and summer seminars) for teachers, counselors, and administrators. While we have some knowledge of teacher professional development programs, little is known about the efforts underway in *pre-service* teacher education programs.

The Holmes Group, a consortium of teacher education deans from 250 colleges and universities, captured the dynamic between teacher education and school reform by defining its goals as "...the simultaneous reform of the education of educators and the reform of schooling. It assumed that these reforms would prosper if the nation's colleges and universities were committed to the education of professionals who work in the schools.[2]" A recent survey of teacher professional development literature and promising practices by the University of Wisconsin- Madison, Center for Education and Work director L. Allen Phelps concluded "The message from recent research, national commissions, and educational reform collaboratives is this: Teacher learning in workplace and community settings is essential in professional development systems and

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[1] U.S. Department of Labor (1991). What work requires of schools: A SCANS report for America 2000. Washington, DC: Secretary's Commission on Achieving Necessary Skills.

[2] The Holmes Group (1995). Tomorrow's schools: Principles for the design of professional development schools. East Lansing, MI: Michigan State University Press.

programs that aim to provide authentic learning experiences for students beyond the school setting.[3] "

While efforts are underway to align teacher education programs with the pedagogy which STW advocates, the regional representatives for the U.S. Secretary of Education (Regions V, VIII, IX, and X) asked the Mid-Continent Regional Educational Laboratory (McREL) and the Northwest Regional Educational Laboratory (NWREL) staff to plan and implement a study to determine what Colleges of Education are currently doing to prepare pre-service teachers for working in School-to-Work environments. The National School-to-Work Office established four Multi-Regional Teams (MRTs) for the purpose of providing technical assistance to STW grantees. In accordance with the proposed technical assistance plan for MRT III (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Iowa, Kansas, Missouri, and Nebraska) McREL conducted a survey of postsecondary teacher preparation programs regarding the extent to which their pre-service curricula and practices include applied learning, curriculum integration, career clusters and other STW concepts as topics of study. At the same time, the Northwest Regional Educational Laboratory (NWREL) conducted the same survey for MRT IV (Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana, Nevada, North Dakota, Oregon, Samoa, South Dakota, Utah, Washington, and Wyoming. A total of 325 university and college teacher preparation programs in 25 states were surveyed; of these 185 (57%) returned completed surveys. This report describes the combined findings from the McREL and NWREL studies.

[3] Phelps, L.A. (1998). "Changing work, changing learning: The imperative for teacher learning in workplaces and communities." Teacher Learning in the Workplace and Community. Madison, WI: Center for Education and Work.

METHODS

A twelve-item survey instrument was developed jointly by McREL and NWREL and reviewed by key individuals in MRTIII and MRTIV before being distributed to institutions of higher education that are members in the American Association of Colleges for Teacher Education (AACTE). The survey was sent by mail to the dean of education at each institution with a request that it be completed by the dean or by the person most knowledgeable about teacher preparation. A follow-up mailing was conducted approximately one month after the initial mailing. The NWREL study also added a telephone call to non-respondents to encourage them to respond or to collect the information directly over the telephone. A copy of the cover letter used by McREL is in Appendix A while the one used by NWREL is show in Appendix B.

Survey findings for the MRT III and MRT IV were run separately by McREL and NWREL using descriptive statistics from the Statistical Package for the Social Sciences (SPSS) and then NWREL ran t-tests on respondents' ratings comparing those from MTR III and MRT IV. Only three ratings of the level of teacher education program graduates out of 18 showed a statistically significant difference at the .05 level and these are discussed in the findings section. Therefore, this report combined data across the 25 states and treats them as a single study.

Findings

The survey developed jointly by McREL and NWREL was distributed to 324 institutions of higher education listed in the 1997 directory of member institutions of the American Association of Colleges of Teacher Education (AACTE) having teacher preparation programs in the 25-state MRT III and IV regions. As a result of the initial and follow-up mailings a total of 185 surveys (57 percent) were completed and returned. Twenty-seven percent of the respondents identified themselves as deans of schools of education, 44 percent as education department chairs, 11 percent as faculty in the school of education, and 19 percent as other educators, mostly associate or assistant deans.

Twenty-five percent of the institutions represented in the findings offer undergraduate teacher preparation programs only, six percent offer graduate programs only, and 69 percent offer both. Based on AACTE basic program enrollment data,[4] the institutions enroll approximately 44,000 students in their teacher preparation programs.

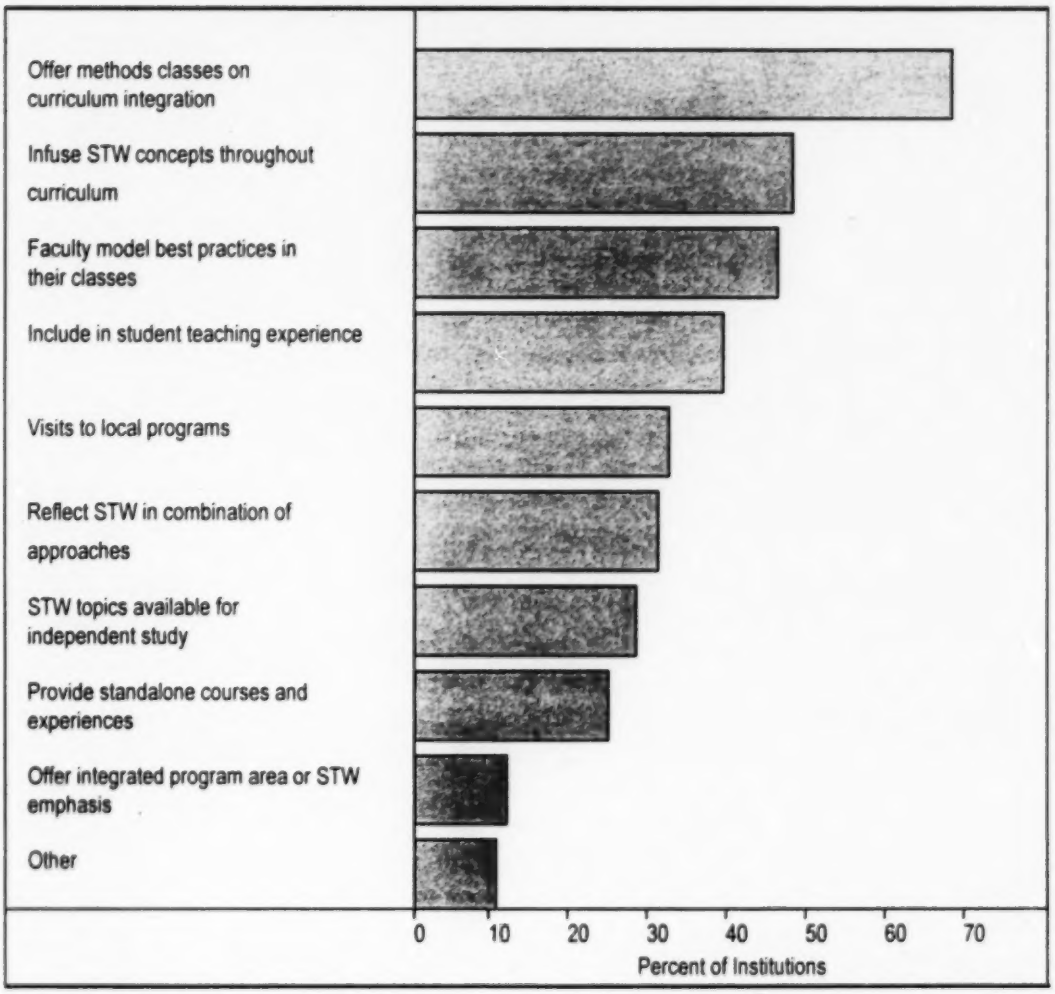
The findings for each survey item are described in the sections that follow. Unless noted otherwise, the percent of all 185 institutions responding to the survey is reported; mean ratings are based on valid, non-zero responses only. A tabulation of the survey appears in Appendix C.

[4] AACTE (1997) *Directory of Members*, Washington, DC.

Educational Strategies

The educational strategies reportedly used by teacher preparation institutions to provide future teachers with skills and knowledge regarding STW are shown in Table 1. As shown in the Table, the most frequently reported strategies were those that rely on traditional teacher preparation activities such as methods classes (66%), existing curriculum (47%), faculty modeling (46%) and student teaching (40%).

Table 1
Ratings Regarding Educational Strategies

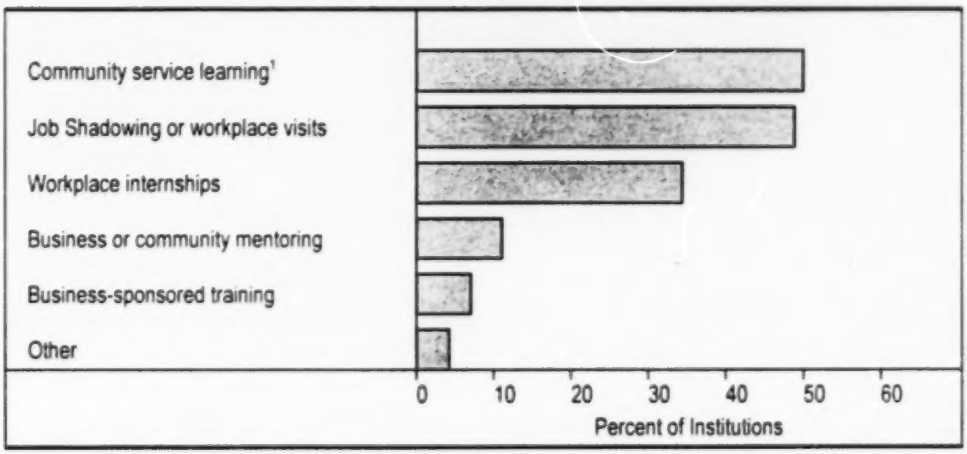


Additional comments provided by respondents focused on two points. First, institutions are just beginning to learn about STW. Second, elements of STW are integrated into a variety of courses but are not explicitly addressed in teacher preparation programs. As one respondent put it, "We do not focus on School-to-Work as a separate issue. Don't all students intend to work as an adult outcome?"

Work-Related Experiences

Table 2 shows the percent of institutions that involve students in work-related learning experiences as part of their pre-service education. As shown in the table, about half of all respondents indicated that their institutions provide (a) community service and/or (b) job shadowing or workplace visits. One third offer workplace internships. Businesses are not frequently involved in these learning experiences. Some respondents' comments indicated that these data generally reflect student teaching or vocational certification requirements rather than specific work related training experiences.

Table 2
Percentage of Institutions Offering Work-related Experiences



Respondents were also asked to estimate the percent of their pre-service students who participate in each type of experience. Mean percents were computed for those institutions that were reported to have at least some students who participate. The results are shown in Table 1. In Table 1, "N" stands for the number of institutions reporting the practice, "Mean" refers to the

[1] The survey asked respondents "Approximately what percentage of your pre-service teacher education students participate in the following work related learning experiences (not including their teaching practicum)?"

average percent of students shown by institutions reporting a percent, and "SD" refers to the standard deviation of the figures reported. With the exception of the "other" category, the means are consistent with the percents shown in ***Table*** 2. That is, the greatest percents of participating students were found for job shadowing (72 percent), workplace internships (59 percent), and community service learning (57 percent); again, business involvement was low. Variability was quite high with estimates ranging from five percent or fewer to as many as 100 percent of students for all of the experiences listed. The mean estimate for participation in "other" experiences was particularly high because it was used by some respondents to indicate student teaching. One respondent stated "We presently do not have structured experiences. However, most of our students work, but we haven't done anything at this point in time to help them make a connection between their [work experience and curriculum.]"

Table 3
Estimated Percent of Students Participating in Workplace Experiences

Experience	N	Mean	SD
Job shadowing or workplace visits	116	52	47
Community service learning	113	46	39
Workplace internship	98	37	43
Business/industry mentoring	71	7	21
Business sponsored training	69	6	19
Other	19	37	49

Faculty Involvement

Respondents were asked to describe the level of faculty involvement in activities that help prepare teachers for School-to-Work systems by rating it on a scale which ranged from "1 = very low, very few faculty participate" to "5 = very high, all faculty participate in school-to-work related activities." One respondent stated "This is changing as faculty gain training and expertise in School to Work." The mean of the ratings provided by 118 respondents was 2.7, or between "low, few faculty participate" and "moderate, some faculty participate." It is important to note that those who did not respond to the item are also likely to have rated involvement as low or very low. Only 21 percent of all survey respondents rated the level of faculty involvement as high or very high.

Several respondents indicated that there is a small but growing awareness among faculty and administrators of STW, particularly among vocational educators and counselors as one respondent stated, "This is changing as faculty gain training and expertise in school to work." However, as one respondent commented, "We all seek to prepare teachers who will prepare citizens who are articulate, mathematically skilled, have good interpersonal communication skills, [and] can work in groups—all work-related and life-related skills."

Those respondents who rated faculty involvement as low or very low were asked to identify the factors that limit their involvement. Most indicated that there was a lack of knowledge or professional interest in the STW concept. "Our faculty are traditional educators, with little work experience beyond teaching; School to Work has not been a priority for them" said one respondent. Others noted that STW is simply not an element of their educational program design because "There are no related state standards for pre-service preparation." Many indicated a lack of time to learn about STW. Several suggested that other faculty commitments are more important. As one respondent wrote, "They are stretched beyond their limits to simply maintain current programs and work toward new performance based models; School-to-Work is not top priority."

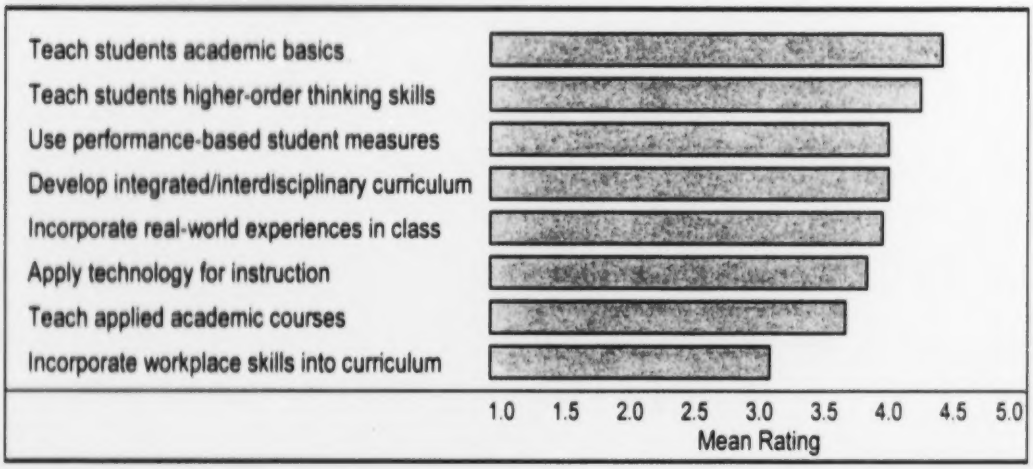
Level of Preparation

Recognizing that teachers may develop the skills and knowledge to work effectively in many aspects of STW systems without any direct involvement in STW programs or courses, respondents were asked to rate how well prepared their graduates are to perform various school-based, work-based, and connecting activities. A 5-point scale was used which ranged from "1 = inadequately prepared" to "5 = extremely well prepared." The mean ratings are shown in Tables 4 to 7.

School-Based Learning

As shown in Table 4, respondents reported that their graduates are well prepared in most aspects of school-based learning. Not surprisingly, the highest mean ratings were obtained for "teach students the academic basics" (mean = 4.5) and "teach students higher order thinking skills" (4.3). The lowest mean rating, which was still above adequate, was obtained for "incorporate workplace skills into curriculum" (3.1).

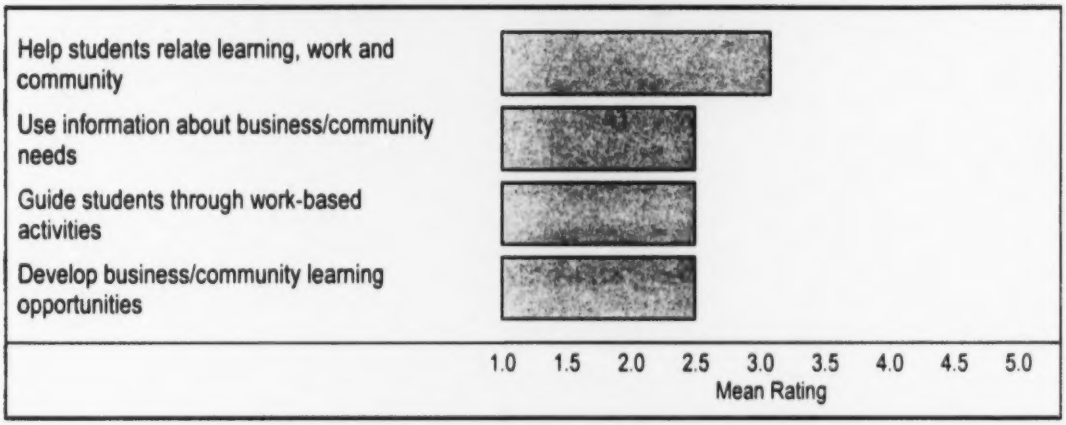
Table 4
Ratings Regarding School-based Learning Outcomes


Teach students academic basics
Teach students higher-order thinking skills
Use performance-based student measures
Develop integrated/interdisciplinary curriculum
Incorporate real-world experiences in class
Apply technology for instruction
Teach applied academic courses
Incorporate workplace skills into curriculum
1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0
Mean Rating

Work-Based Learning

As shown in Table 5, the mean ratings for work-based learning activities were lower than those for school-based activities. Respondents indicated that teachers are adequately prepared to help students understand the relationship among learning, work and the community (mean = 3.0) but less prepared to identify, develop or implement work-based learning opportunities (mean=2.5).

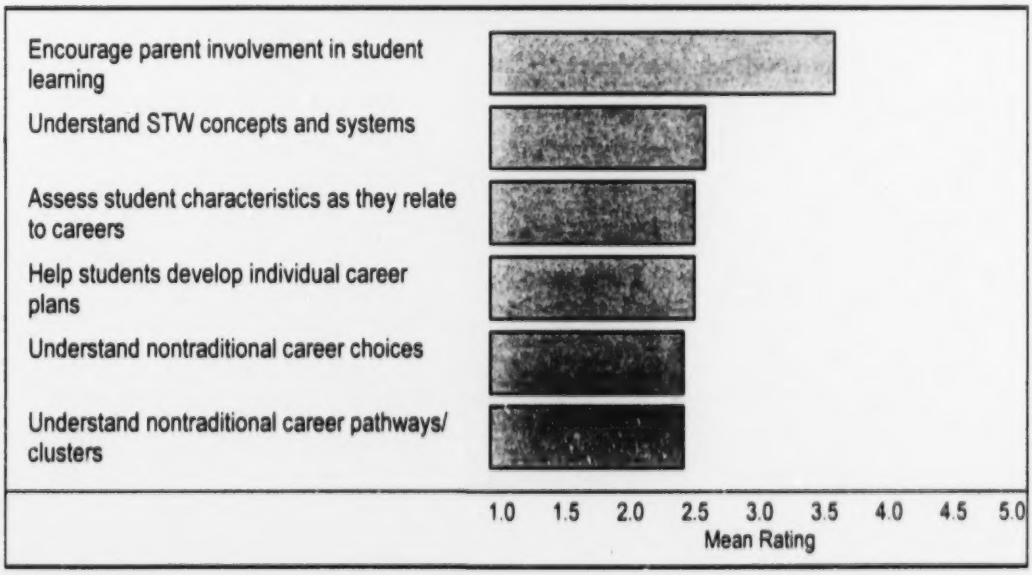
Table 5
Ratings Regarding Work-based Learning Outcomes


Help students relate learning, work and community
Use information about business/community needs
Guide students through work-based activities
Develop business/community learning opportunities
1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0
Mean Rating

Connecting Activities

Table 6 shows the mean ratings for connecting activities. While respondents rated their graduates as adequately to well prepared to "encourage parent involvement in student learning" (mean = 3.6), mean ratings were lower for activities related to career assessment and planning (mean = 2.5) and for understanding and using career pathways/clusters (mean = 2.4).

Table 6
Ratings Regarding Connecting Activities


Encourage parent involvement in student learning
Understand STW concepts and systems
Assess student characteristics as they relate to careers
Help students develop individual career plans
Understand nontraditional career choices
Understand nontraditional career pathways/ clusters
1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0
Mean Rating

Multi-Regional Comparisons

Across the 18 items for which graduates were rated, only three showed a statistically significant difference at the .05 level. These are shown in Table 7. In each case the ratings for the Region IV were higher than for Region III.

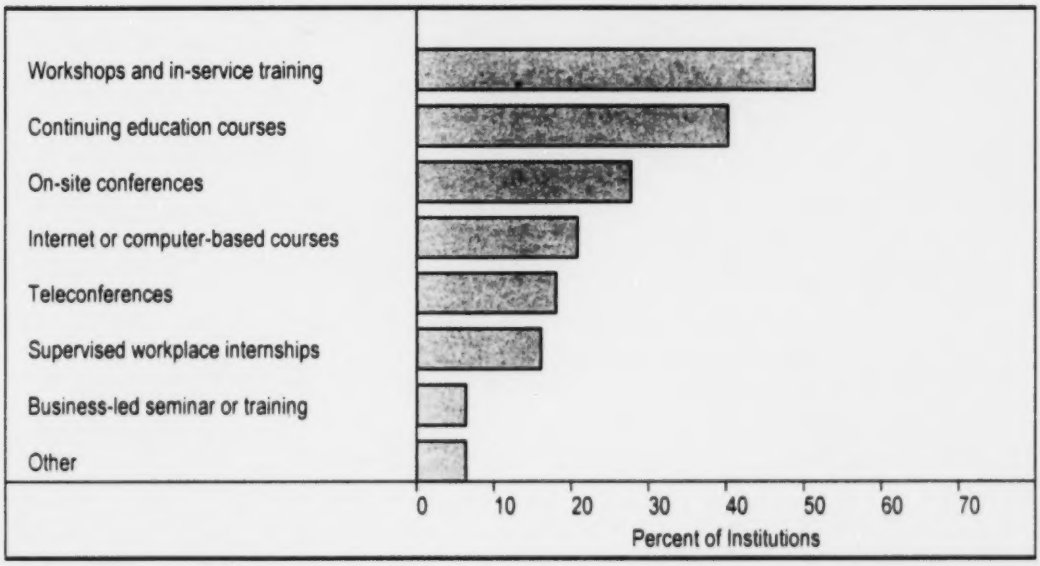
Table 7
Areas in which Multi-Regional Team III (McREL) and Region IV (NWREL) Findings were Significantly Different

Graduates are well prepared in:	Level of Significance	MRT IV Mean	MRT III Mean
Incorporating workplace skills into the curriculum	.02	3.20	2.80
Helping students understand the relationship among learning, work and the community	.01	3.26	2.79
Assessing student interests, aptitudes, and the community	.02	3.75	3.33

Professional Development

Survey respondents were asked to indicate which professional development opportunities their institutions offer to provide existing classroom teachers with skills and knowledge regarding STW. The results are shown in Table 8. As shown in the table, 51 percent provide workshops and in-service training and 40 percent offer continuing education courses and only 16 percent offered supervised workplace internships. Of the few comments that were provided, most simply indicated that their institutions did not offer professional development opportunities related to STW.

Table 8
Ratings Regarding Professional Development Activities



Level of Commitment

Respondents were asked to indicate the overall level of commitment of their institutions to preparing teachers for School-to-Work systems by rating them on a scale which ranged from "1 = very low, School-to-Work is not seen as important" to "5 = very high, School-to-Work is seen as an essential part of preparing teachers." The mean of the ratings provided by 168 respondents was 3.0, or "moderate, School-to-Work is seen as somewhat important." As was the case with faculty involvement, those who did not respond to the item are likely to have rated it low. Only 30 percent of all survey respondents rated the level of commitment as high or very high.

Opinions were clearly divided regarding both the wisdom of STW systems in general and their appropriate priority for higher education. Several respondents simply did not see a legitimate role for their institutions in STW. As one faculty member wrote,

> "We believe high schools prepare students for life and citizenry. Therefore we prepare teachers to provide the foundation of knowledge and skills that all citizens need to participate in our society—literacy, communication skills, computational skills and an understanding of the historical and cultural bases of our society. We do not train our teachers to train their students for work but train our teachers to teach their students thinking skills that will serve them in any position."

Another was more succinct, noting that "Fodder for the capitalist machine is not our priority."

Other respondents suggested that while School-to-Work is recognized as an important educational issue, it has relatively low priority among the many issues—such as limited resources and accreditation requirements—facing higher education. This quote exemplifies several respondents' comments: "With everything else, we haven't gotten to it." Several suggested more information was necessary "...you can't be committed to something of which you know little or nothing."

Future Plans

Respondents were asked to describe what future plans, if any, their institutions have for increasing their ability to prepare teachers to work in a STW system. By far the most common response was "We have none at the present time." The other most frequent responses were: (a) STW will be addressed as part of the established curriculum review and revision process, (b) there will be continued or new involvement in STW grants or partnerships, and (c) efforts to share information about STW among the faculty are planned or underway. Like K-12 educators, post-secondary educators are struggling "...to have faculty see it as an integrated part of the program not an add-on."

CONCLUSIONS AND RECOMMENDATIONS

Survey findings show there is limited awareness, understanding, and acceptance of School-to-Work concepts among institutions of higher learning in the twenty-fives states surveyed. Data suggests teacher education administrators believe their graduates are well prepared to provide school-based learning, but are less well prepared to connect school and work. Respondents also believe their graduates are not well prepared to facilitate work-based learning opportunities for students. Yet, this disparity does not constitute a priority in terms of program planning: Most representatives indicated no plans to further develop a STW emphasis in their teacher preparation program. Their commitment to STW was moderate.

The National School-to-Work Office, in its 1997 report to Congress, indicated that STW continues to grow. Given the disparity between perceived level of knowledge and the large number of students, districts, and businesses involved in STW, it would be beneficial for teacher educators to emphasize STW in pre-service teacher education programs. Specifically, we recommend teacher educators focus on integration of work-based learning, school-based learning, and career exploration. The following sample activities may help pre-service teachers learn more about STW:

- Integrate methods classes so that pre-service teachers write curriculum in cross-curricular teams.
- Engage pre-service teachers in work-based learning opportunities in business/industry so they experience the places their students will eventually work;
- Have pre-service teachers engage in applied or action research in schools, the community, or businesses so they experience authentic, contextual learning;
- Involve business/industry representatives and school personnel in the instruction of pre-service teachers either by co-teaching a class, presenting, or dialoguing with pre-service teachers about expectations of secondary school graduates.

For decades, teacher education programs have been engaged in work-based learning through the student experience. Indeed, student teaching models STW because student teachers are supported by university personnel (school-based learning) and supervising teachers (worksite mentors) who regularly meet to confer about pre-service teachers' progress (connecting activity). If the intention of student teaching is supported work emulation and more school districts are becoming involved in STW, then pre-service teachers should have some understanding of STW concepts and vocabulary.

STW advocates in government, school districts, business/industry should encourage pre-service teacher education programs to prioritize STW and emphasize it as part of pre-service training. As several respondents indicated, stronger linkages between emerging state minimum teaching competencies, contextual learning, and STW will assist higher educators to integrate key

concepts into the curriculum. School districts can help customer-driven teacher preparation programs to prioritize STW content and methodology by screening job applicants for a basic understanding of STW and its application to contextual learning. Otherwise school districts will need to retrain teachers.

Teacher education program support of STW is critical in sustaining the momentum of school reform, and yet few of the teacher education programs completing the survey say they are adequately training pre-service teachers in STW concepts. Identification and dissemination of best practice teacher education models, support for development of model programs, and information sharing may help teacher educators see benefits in STW, dialogue about issues surrounding STW implementation, and design better teacher education programs. Several teacher educators indicated information sharing, STW marketing, and teacher educator training are necessary in order to address STW in pre-service curriculum.

Further study is needed to accurately describe pre-service teachers' transition from school to work in our nation's public schools. This survey targeted the perceptions of teacher education administrators and provided a picture of the field. A survey and follow up study of novice teachers would provide better insight into the usefulness of STW knowledge and the knowledge gaps that exist between new teachers' understanding of STW and what is required to be successful in the field.

APPENDIX A
MCREL COVER LETTER

September 10, 1997

Dear Dean or Department Chair:

As you know, the 1994 School-to-Work Opportunities Act provides states with federal assistance to develop and implement statewide systems to ensure all K-12 students have access to a seamless transition from secondary education into high quality employment and/or further education. This collaborative effort between the U.S. Departments of Education and Labor relies on three strategies: (a) school-based learning that is relevant to the world of work and reflects strong academic standards; (b) awareness, exploration, and participation in careers and work-related learning experiences; and (c) connecting activities that establish links between schools and businesses. These strategies are implemented through grants to state and local partnerships of educators, business, industry, labor, and community-based organizations.

Professional development is a critical factor in the success of school-to-work. Teachers, counselors, and administrators need to understand its underlying concepts and be able to support it in their professional practices. Program grantees typically allocate a significant part of their budgets to providing in-service training for educators from participating schools. However, little is known about the efforts that are underway at the pre-service level. The regional representative for the U.S. Secretary of Education has asked that we contact you for information regarding how your institution prepares teachers to participate in school-to-work systems. Please take a few minutes to complete the attached questionnaire -- or ask someone in your institution who would be better able to respond -- and return it in the envelope provided.

Thank you in advance for your assistance. If you have any questions do not hesitate to call me at (303) 632-5525.

Sincerely,

Robert Keller, Ph.D.
Project Director

APPENDIX B
NWREL COVER

Dear Dean or Department Chair:

As you know, the 1994 School-to-Work Opportunities Act provides states with federal assistance to develop and implement statewide systems to ensure that all K-12 students have access to a seamless transition from secondary education to high-quality employment and/or further education. This collaborative effort between the U.S. Departments of Education and Labor relies on three strategies: (1) school-based learning that is relevant to the world of work and reflects strong academic standards; (2) awareness, exploration, and participation in careers and work-related learning experiences; and (3) connecting activities that establish links between schools and businesses. These strategies are implemented through grants to state and local partnerships of educators, business, industry, labor, and community-based organizations.

Professional development is a critical factor in the success of school-to-work. Teachers, counselors, and administrators need to understand its underlying concepts and be able to support it in their professional practices. Program grantees typically allocate a significant part of their budgets to providing in-service training for educators from participating schools. However, little is known about efforts that are underway at the pre-service level. The regional representative for the U.S. Secretary of Education has asked that we contact you for information regarding how your institution prepares teachers to participate in School-to-Work systems. Please take a few minutes to complete the attached questionnaire—or ask someone in your institution who would be better able to respond—and return it in the envelope provided.

If you or a faculty member would be interested in pursuing these issues further, deans from several Western states will be gathering in conjunction with the 14th Work Now and in the Future conference November 3–4 (see the enclosed flyer). In appreciation of your taking time to complete and return this survey, we will waive the conference registration fee—a $495 value—for you or your representative. Please use the enclosed special registration form and return it with the survey by October 23, 1997.

Thank you in advance for your assistance. If you have any questions do not hesitate to call me at (503) 275-9597 or 1-800-547-6339, ext. 597.

Sincerely,

Dr. Larry McClure, Director
Education and Work Program

Enclosures

APPENDIX C
TABULATED COPY OF THE TEACHER PREPARATION FOR SCHOOL-TO-WORK SURVEY

(N=185 Respondents)

Please complete all items on behalf of your institution. When you have completed the survey, please return it to NWREL in the business reply envelope provided. Thank you for your prompt reply!

1. What is your current position? (check all that apply) Percent

   (27) Dean, School of Education (1) Dean, School of Vocational Education (2)Vocational Education Department Chair (44) Education Department Chair (11) Faculty, School of Education (17) Other *(specify)*

2. What level of teacher preparation program do you offer? (check one) 25 undergraduate 6 graduate 69 both

3. Which particular educational strategies are used by your institution to provide future teachers with skills and knowledge regarding school-to-work?* *(check all that apply)*

   66 offer methods classes on curriculum integration
   47 infuse school-to-work concepts throughout the curriculum
   24 provide stand alone courses and experiences
   40 include in student teaching experience
   33 encourage visits to local programs
   12 offer integrated program area or emphasis in school-to-work systems
   29 include school-to-work topics in independent study or thesis
   31 reflect school-to-work in a combination of approaches
   46 model best practices in teacher preparation (e.g., integrated projects) courses
   11 other *(specify)*

   Comment? _____

4. Approximately what percentage of your pre-service teacher education students participate in the following work related learning experiences (not including their teaching practicum)? *(enter number; if none, write 0) (The first figure represents the % of institutions having students participate.) (The second figure, in parenthesis, represents the average % of students participating in these institutions)*

	Percentage. 0 -99			Percentage
job shadowing or workplace visits	49	(52)	workplace internship	34 (37)
business/industry mentoring	11	(7)	business sponsored training	8 (6)
community service learning	50	(46)	other (specify)	4 (37)

Comment? _____

*School-to-work, called school-to-career in some communities, refers to restructuring education so that school-based learning is integrated with learning in the community to increase opportunities for all students to identify and pursue their educational and career goals.

5. How would you describe the level of faculty involvement in activities that help prepare teachers for school-to-work systems? *(check one)*

9 very high, all faculty participate in school-to-work related activities

12 high, most faculty participate

33 moderate, some faculty participate

24 low, few faculty participate

23 very low, very few faculty participate

Comment? _____

6. If faculty involvement is low or very low, what factors limit their involvement? _____

"Our faculty are traditional educators, with little work experience beyond teaching. School-to-Work has not been a priority for them."

"There are no related state standards for pre-service preparation."

"With the exception of business education, all programs are general education."

"Little interest in or perceived responsibility for School-to-Work."

"Knowledge, time."

"Unawareness by far the most detrimental, there is no state leadership. Where is the money going?? Also, no mention of School-to-Work from districts when we do periodic market surveys."

""Philosophical differences - some think it is important, some think it is a passing trend."

"Time, knowledge on their part, resources."

"Knowledge of the concept of School-to-Work."

"The one instructor is very involved."

"n/a"

"Time, lack of expertise, resources."

"Lack of awareness; holding onto old stereotypes of vocational education."

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7. How well prepared are graduates of your teacher preparation program to do each of the following: *(check one for each)*

Percent

	Extremely Well Prepared	Well Prepared	Adequately Prepared	Marginally Prepared	Inadequately Prepared	Mean	SD
School-based Learning							
1 incorporate workplace skills into curriculum	7	32	27	28	6	3.1	1.1
2 develop integrated/interdisciplinary curriculum	29	42	24	4	1	4.0	.9
3 teach students the academic basics	55	37	6	1	1	4.4	.7
4 teach students higher-order thinking skills	46	42	10	2	1	4.3	.8
5 teach applied academics courses	23	34	26	14	3	3.6	1.1
6 incorporate real-world experiences into the classroom	30	40	22	7	1	3.9	.9
7 use performance-based measures of student knowledge, skills and abilities	28	44	23	4	1	4.0	.9
8 apply technology for instruction	22	43	7	8	0	3.8	.9
Work-based Learning							
9 develop business/community learning opportunities	0	13	34	41	12	2.5	.9
10 guide student learning through work-based activities	5	12	30	36	17	2.5	1.1
11 assess/use information about business and community needs	3	12	32	41	12	2.5	1.0
12 help students understand the relationship among learning, work, and the community	11	20	37	27	5	3.1	1.1

	Extremely Well Prepared	Well Prepared	Adequately Prepared	Marginally Prepared	Inadequately Prepared	Mean	SD
Connecting Activities							
13 understand school-to-work concepts and systems	4	14	35	33	15	2.6	1.0
14 understand and use career pathways/ clusters	3	13	27	37	20	2.4	1.0
15 help students develop individual career plans	4	10	34	40	13	2.5	1.0
16 understand nontraditional career choices	2	12	31	36	18	2.4	.8
17 assess student interests, aptitudes, and achievement as they relate to careers	5	14	29	34	19	2.5	1.1
18 encourage parent involvement in student learning	16	44	26	12	2	3.6	1.0

Comment? _____

8. Which professional development opportunities are offered by your institution to provide existing classroom teachers with skills and knowledge regarding school-to-work? *(check all that apply)*

1 workshops and in-service training
40 continuing education courses
27 summer institutes or academies
3 supervised workplace internships
24 on-site conferences
17 teleconferences
21 Internet or computer-based courses
6 business-led seminar/training
6 other *(specify)* "A faculty member is receiving training to become a trainer of trainers"; "S.T.W. Grant will provide workshops during this year"

Comment? _____

9. Overall, which statement best describes the level of commitment of your institution for preparing teachers for school-to-work systems? *(check one)* Mean 3.0 SD 1.1

10 very high, school-to-work is seen as an essential part of preparing teachers
20 high, school-to-work is seen as important
44 moderate, school-to-work is seen as somewhat important
17 low, school-to-work is not very important
10 very low, school-to-work is not seen as important

Comment? _____

10. What future plans, if any, does your institution have for increasing its ability to prepare teachers to work in a school-to-work system? _____

"We are developing new teacher prep curriculum with a family of K-12 schools. I expect that it will be an issue there."

"We will continue to have a summer business/education exchange program."

"None."

"We are planning with our local community college and continue to work with faculty toward infusion into our teacher ed program."

"Continue more of what we are currently doing."

"In discussions with faculty."

"Continued emphasis in method and strategies classes."

"As we receive our curriculum we will integrate School-to-Work concepts throughout."

"We have a new faculty member who will attempt to make contacts and help determine what our role should be."

"One of our School-to-Work grants calls for development of School-to-Work modules which will be integrated into introductory courses. Another grant (subcommittee) calls for working with a group of about 30-40 student teachers to provide them with specific training and assignments to integrate STC concepts and workplace skills into their instruction."

"Have a hired part time person STW to begin on campus training, establish web-page, etc ..."

"Have not discussed."

"We have an undergraduate vocational program - Applied technology - that prepares teachers. We have a Vocational Education Master's, also."

"Need more funds at the academic V.P. level."

"Implementing projects funded by state & federal programs. Just beginning to reach out to faculty at large."

"Secondary block program is developing professional school partnerships."

_____

11. Do you have any other comments that will help us to better understand how your institution prepares teachers for school-to-work systems? _____

_____

12. As part of this survey we would like to identify individuals who could further describe the nature of your teacher preparation efforts. Are there faculty members who we might contact who are particularly knowledgeable about the relationship between your teacher preparation program and school-to-work? *(please identify one or two)*

Name	Phone Number	E-mail Address
_____	(_____)_____	_____
_____	(_____)_____	_____